

Minnesota's Great Lakes Charter Fishing Industry in 2002

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This publication summarizes the findings of the Great Lakes Sea Grant Network study on the charter industry in the Great Lakes. Individual fact sheets have been developed in conjunction with the Great Lakes Fisheries Leadership Institute for the following regions: Illinois-Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania, and Wisconsin. The goal of the Great Lakes Fisheries Leadership Institute is to provide the next generation of fisheries leaders for the Great Lakes region with the skills they need to effectively interact with fisheries management agencies. This document was produced by the Ohio Sea Grant College Program as a part of the Great Lakes Fishery Leadership Institute project of the Great Lakes Sea Grant Network.

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Introduction

In the fall of 2002 and winter of 2003 the Great Lakes Sea Grant Network conducted a comprehensive survey of the charter fishing industry of the Great Lakes. The survey is an effort to provide an update on the status, characteristics and economics of the charter fishing business in the Great Lakes and is modeled after a similar survey conducted in 1994. All data reported here are for the year 2002.

Methods

The Minnesota and the Ohio Sea Grant programs surveyed Minnesota's charter-fishing captains in October and November of 2002 using a modified Dillman mail survey technique (Dillman 1978). Non-respondents were sent up to three reminder letters. In 2002, there were 44 licensed Minnesota captains, this represents a decline of almost 23% from the 57 captains in 1994. A total of 26 captains returned surveys with usable data, a response rate of 59%. Of the responding captains, 88% were based in Minnesota and 12% in Wisconsin.

Business

The typical Minnesota charter-fishing captain in 2002 has been licensed for 8.75 years. All responding captains operated their own charter firm (**Table 1**). Most businesses (84 %) operated one boat, which is typically 27.8 feet long, almost 22 years old, and powered by an inboard (64%), inboard/outdrive (27%) or outboard (8%) motor.

The average replacement cost for a Minnesota charter vessel is \$49,808, and replacement cost for onboard business-related equipment is, \$13,571. About 58% of the respondents use a vehicle for towing their boat and other charter-related business. The average replacement cost of the vehicle was \$21,700; for the trailer it is \$2,778. The vehicle is used for boat towing 17% of the time and for other charter business 36% of the time.

Captains

All of the responding captains were "six-pack" operators, licensed to carry no more than six passengers. Notably, about 27% of the captains rely on the charter business as their primary source of income (**Table 2**).

Almost 73% of the 26 responding captains are members of a professional charter captains association. The top three cited benefits from membership in a professional charter captains association are drug testing, education on current issues and regulations, and industry representation to state, federal and local authorities (**Table 3**).

Trips

Responding captains average over nine full day and over 36 half-day paid charter trips per year (**Table 4**). Most (94%) of these are for lake trout and salmon. Applying the response data to the total population of 44 active

Table 1
Ownership and Organization of Minnesota Charter Boat Fishing Businesses

Characteristics	Percent of Respondents	Number of Respondents
Business Ownership		25
Sole proprietor	88%	22
Partnership	4%	1
Corporation	8%	2
Business Organization		25
Owned own boat	92%	24
Leased or rented boat	4%	1
Salaried Employee	0%	0
Freelance hire per trip	0%	0
Other arrangement	4%	1

Table 2
Reasons for Entering /Remaining in the Minnesota Charter Fishing Business
26 Respondents were asked to check all that apply.

Reason	Percent of Respondents
Help people enjoy fishing	69%
Like the work	62%
Secondary source of income	46%
Primary income source	27%
Other	4%

Table 3
Benefits of Membership in a Minnesota Professional Charter Boat Association
26 Respondents* were asked to select the top three reasons.

Benefit	Percent of Respondents
Drug testing	73%
Education on current issues and regulations	54%
Industry representation to state, federal, and the local authorities	42%
Advertising	35%
Can Share charters	15%
Get tips about fishing	12%
Obtain business operation ideas and advice	8%
Increased business	8%
Can obtain pricing information	4%
Group insurance	4%
Other benefits	4%

* 73% are members of a professional charter captains association.

Table 4
Estimated Trips and Revenues* for the Minnesota Industry
 24 Respondents

Fish Species	Number of trips	Average No. Trips/business	Average Charge/Trip	Revenues Earned
Steelhead				
Full day	7	.2	\$322	\$55
Half day	8	2.0	\$263	\$526
Lake Trout and Salmon				
Full day	382	8.7	\$425	\$3685
Half day	1494	34.5	\$282	\$9745
Walleye				
Full day	9	.2	\$308	\$65
Half day	13	.3	\$263	\$76
Subtotals				
Full day	398	9.1		\$3804
Half day	1595	36.3		\$10,179
Totals	1993	45.3		\$13,983

* The numbers of trips are extrapolations of respondent trip rates applied to the total population of Minnesota Great Lakes charter captains. Revenues are calculated from the average number of trips per business multiplied by the average charge per trip.

Table 5
Services Offered by Minnesota Charter Boat Operators

Service or Provision	-----Percent of Respondents-----		
	Included in Base Charter Fee	Included for Additional Fee	Number of Respondents
Tackle	100%	0%	25
Fish cleaning	100%	0%	25
Bait	100%	0%	24
Ice	87%	0%	23
Photos/Video of Trip	35%	15%	20
Lodging/Food	0%	18%	17

Table 6
Average Annual Operating Costs for Minnesota Boat-Owning Captains
 18 Respondents

Item	Expense
Equipment repair	\$1,992
Fuel/Oil	1,473
Labor (hired)	1,399
Advertising	1,093
Miscellaneous	960
Boat maintenance and repair	907
Dockage	904
Insurance	785
Office & Communications	700
Boat storage fees	391
License fees	297
Boat repair not covered by insurance	134
Drug testing/Professional dues	118
Boat launch fees	11
Total Operating Costs	\$11,164

captains yields and estimated 1,993 charter trips of which 20 % were full day and 80% were half-day trips.

August is the busiest month. About 31% of all trips taken in 2002 were run in August. This was followed by July with 25% of the reported trips and June with 20% of the reported trips. Almost 16% of the reported trips were run in September and about 8% of the trips were taken in May. Less than 1% of the trips were run in October. No trips were reported in March or April.

Charter fees vary according to target species, length of the charter, and services offered. The most popular trip was the half day lake trout and salmon charter; its cost averaged \$282 per boat (range \$25 to \$385). Half-day trips were defined as trips lasting less than seven hours. Services and Provisions

Most charter businesses provide bait, tackle, ice, and fish cleaning as part of their standard charter trip service. A few captains offered trip photos, videos, lodging and food for an additional fee (**Table 5**).

Costs and Returns

For boat owning captains, the largest annual operating expenses were equipment repair, boat fuel, and hired labor (**Table 6**). Boat loan payments are a high cash outlay but are not part of operating costs.

The average cash requirement to operate the charter firm includes the operating expenses plus the boat loan payments. Average annual boat loan payments including principal and interest are \$2,763. The average annual cost to operate a Minnesota charter firm is \$13,927 for those making boat loan payments and \$11,164 for those who do not (**Table 7**). This means that the typical charter firm that owns and operates a single vessel must generate sales of either \$13,927 or \$11,164 just to meet the cash needs of the firm depending on whether or not their boat is paid off.

Estimated average annual revenues are \$13,983. The result is a net positive cash flow of just \$56 for firms making boat loan payments and a positive cash flow of \$2,819 for firms with not making boat loan payments. Depending on the situation, those firms with a positive cash flow could pay the day-to-day bills to operate the charter business from the revenues earned from chartering.

Economic costs are the costs of operating the charter firm except for the cost of a boat loan. The economic costs include operating costs (\$11,164) plus capital costs. Boat loan payments are a cash requirement if a loan exists, but are not part of the economic costs. Capital costs include depreciation of the boat, and the opportunity cost of owning a boat instead of investing in stocks, bonds, or some other enterprise.

The average annual depreciation reported by responding captains was \$2,640. Estimated replacement cost of the boat (\$49,808) and equipment (\$13,571) totals \$63,379; interest costs based on 5% of the replacement cost of the boat and equipment are \$3,169. Thus the capital cost (depreciation + interest) is \$5,809. The economic cost to operate a typical Minnesota charter firm is \$16,973 for a firm depreciating a vessel and \$14,333 for a firm with a fully depreciated vessel. Any revenue in excess of these figures is the return to owner labor and management.

To provide a positive return to the operating captain for time and labor, the average Minnesota charter business would have had to generate sales exceeding

\$16,973 or \$14,333 to cover the average operating and capital costs. Depending on the depreciation situation, the average Minnesota charter firm operated at a net negative return of either -(\$2,990) or -(\$350) for the owners time and labor. At an average price of \$282 for a half day salmon/lake trout charter a captain would have to run 60 or 51 half day salmon/lake trout trips to cover average operating and capital costs.

Promotion

Approximately 85% of Minnesota charter customers come from over 50 miles or further away from the charter firm's homeport bringing nature based tourism dollars into the community.

Captains used various methods of marketing and advertising and rated them for effectiveness on a scale of 1 (not effective) to 3 (very effective) (Table 8). Two advertising methods that we included in the 2002 survey that were not in the 1994 survey were a "world wide web site" and "tourism promotion agency publications/web site". A majority of captains consider word of mouth, brochures, and their web site to be the most effective means of advertising. All the respondents use word of mouth, 96% use brochures and 65% use a web site for advertising. About 35% of the captains advertised in chamber of commerce publications. Those advertising in chamber of commerce publications ranked that method as effective as using brochures or the website.

Lake Information

About 26% of 23 responding captains utilize the Great Lakes Forecasting System web site (superior.eng.ohio-state.edu) and over 62.5% use the Sea Grant Coastwatch web site (coastwatch.msu.edu) for information on lake waves, water currents, surface temperatures and lake status. Those accessing these web sites use them to help find fish, make decisions, improve fish catch, plan charter trips and improve charter safety.

Industry Trends and the Future

In 2002, the Minnesota charter firms made an estimated 1,993 charter trips compared to an estimated 1,888 trips in 1994 (Lichtkoppler and Dawson 1996). The 44 charter captains generated an estimated \$615,260 in gross sales in 2002 (44 firms x \$13,983 per firm). This is compared to the inflation adjusted estimated \$597,850 in gross sales generated by 51 active captains in 1994 (51 firms x \$11,590 plus 6 captains for hire x \$1,127) (Lichtkoppler and Dawson 1996).

Captains were asked to select the three most important problems facing the charter industry (Table 9). The top concern is fisheries management, followed by the economy, poor weather conditions/climate, boating equipment and operating costs and changes in forage fish populations. It is interesting to note that except for possibly boating equipment and operating costs these concerns are outside the control of individual charter captains.

With almost 12% of the respondents planning to quit the business and many firms not making a positive net return to the operators time and labor a continuing decline in the number of firms is expected (Table 10). However, the remaining charter firms in 2002 did make more trips per firm (45.1) than in 1994 (37.0). Most captains (77%) plan to increase the number of trips they make over the next five years and over 42% plan to increase their charter fees.

Table 7
Annual Cash Flow of Average Minnesota Charter Firm

Income/Expenses	Businesses WITH Boat Loan Payments	Businesses WITHOUT Boat Loan Payments	No. of Respondents
Average Revenue	\$13,983 ¹	\$13,983 ¹	24
Cash Flow Needs			
Average operating costs	11,164 ²	11,164 ²	18
Boat loan payments	2,763 ³	0	4
Cash Needed	13,927	11,164	
Net Cash Flow	\$56	\$2,891	
Economic Cost			
Average operating cost	11,164	11,164	
Capital costs			
Interest Costs	3,169	3,169	
Depreciation	2,640 ⁴	0	4
Total Economic Cost	\$16,973	\$14,333	
Net Return to Operator	-\$2,990	-\$350	

¹ Average revenues are based on 24 respondents.

² Average operating costs are based on 18 respondents.

³ Four respondents reported boat loan payments.

⁴ Five respondents reported depreciation.

Table 8
Methods of Advertising Charter Fishing Businesses in Minnesota
23 Respondents

Advertising Method	Percent of Respondents	Number of Respondents	Effectiveness*
Word of mouth	100%	23	2.4
Brochures	96%	22	2.5
Website	65%	15	2.5
Direct mailings	57%	13	1.7
Signs	48%	11	2.1
Tourism promotion agency	48%	11	2.0
Charter association publications	35%	8	1.5
Chamber of commerce publications	35%	8	2.5
Telephone directory	35%	8	2.3
Newspaper ads	26%	6	1.5
Sport & travel shows	13%	3	1.7
Magazine ads	4%	1	1.0
Other	9%	2	3.0

*Scale = 1 (not effective) to 3 (very effective)

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Strategies for Charter Businesses

It is a good idea to occasionally examine your charter business management with an eye to improvement. Results of the 2002 Great Lakes charter captain surveys suggest that to increase future profitability, charter captains should reduce expenses, increase revenues and aggressively market their industry.

Refinancing your boat at a lower interest rate, holding onto an older paid off boat in good condition or buying a newer boat at a favorable price to avoid large repair bills may be ways to reduce your expenses.

The most direct ways to increase revenues is to increase the number of charter trips that are made and by offering additional services such as executive charters, or dive charter trips. Increasing your prices may or may not be possible depending on the demand and the specific market where you operate. Some captains increased the number of trips they make by following the seasonal nature of the fishery and fishing out of the "hot" ports at different times of the angling season. Half-day trips are popular as a way to lower costs to clients and increase the total number of trips made.

Captains should carefully market their product (a nature based tourism experience on a world class resource) and try to expand the client base to include the growing number of middle aged, nature-experience tourists with above average disposable incomes. Captains should seek ways to expand the client base by using industry-wide marketing efforts or by cooperating with local, state, and regional tourism bureaus.

Marketing toward non-traditional customers (i.e. women and minorities) may present opportunities for increased business as does marketing executive, fly-fishing, or other special charters. Captains may also want to consider differential pricing of charters to even out charter activity. Differential pricing may help to increase charter trip activity in the spring and fall "shoulder" seasons.

Captains can continue to build on a positive professional image of the charter industry by stressing safety, effective efficient angling opportunities, a higher than average catch rate and a "world class Great Lake angling experience" in their marketing efforts.

Captains should consider membership in a professional charter captain's organization. Belonging to a professional organization allows members to work with decision makers, fishery managers, and regulators from an organized power base.

References

- Dillman, D.A. 1978. *Mail and Telephone Surveys: The Total Design Method*. New York: John Wiley and Sons.
- Lichtkoppler, F. 1996. *Minnesota's Lake Superior Charter Fishing Industry in 1994*. Columbus, OH: Ohio Sea Grant College Program.

Table 9
Concerns of the Minnesota Charter Fishing Industry
26 Respondents

Concerns	Percent of Respondents
Fisheries management	39%
The economy	35%
Poor weather/climate	31%
Boating equipment and operating costs	27%
Changes in forage fish populations	27%
Lack of fish/reduced abundance	23%
Government regulations	15%
Illegal fishing practices	15%
Impacts of exotic species (zebra mussels)	15%
Un-sportsmanlike behavior of captains	15%
Poor weather forecasting	12%
Drawing clients	12%
Un-sportsmanlike behavior of anglers	8%
Other problems	8%
Toxic contaminants	4%
Fish consumption advisories	4%
Over harvest of fish stocks	4%
Lack of one-day nonresident fishing license	0%
Lack of information on the fishery	0%
Overcrowding of the fishery	0%
Changes in water currents	0%
Avian Botulism	0%

Table 10
Five-Year Plans of Minnesota Charter Captains
26 Respondents

Activity	Percent of Respondents
Increase of number of annual trips	77%
Increase prices of charter services	42%
Buy/operate bigger boat	23%
Buy/operate newer boat	23%
No major changes	15%
Hire additional first mate(s)	15%
Quit the charter business	12%
Branch out into other fishing related businesses	8%
Expand into multi-activity and/or non-fishing charters	8%
Decrease number of annual trips	4%
Buy/Own charter boat	4%
Other	4%
Buy/Operate an additional boat(s)	0%
Decrease Prices	0%
Hire additional charter captain(s)	0%